The Paris to Projects Research Initiative

Discussion Paper

Key considerations for the strategic assessment of climate commitment implications

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1. Basic requirements for meeting Canada's climate commitments in assessments

The new federal *Impact Assessment Act,* as passed by the House of Commons on 20 June 2018, requires attention to whether proposed designated projects would be consistent with meeting Canada's climate change commitments. In particular, the Act requires consideration of whether the effects of assessed projects would

> hinder or contribute to the Government of Canada's ability to meet its environmental obligations and its commitments in respect of climate change [s.22(1)(i) and s.63(e)]. [1]

Effective application this requirement will depend on considerable clarification and specification. Some of the needed direction may come through amendment of the statute as it proceeds through the Parliamentary process. Much, however, will be left for regulations and associated policies. Informed and consistent application will also depend on action beyond assessment law and policy – for example, to translate the *Paris Agreement* and related international commitments into deadlines and viable pathways to meeting them, establish carbon budgets and pricing, standardize analytical approaches, and allocate responsibility across jurisdictions, regions and sectors.

As a beginning for assessment purposes, it is possible on the basis of broader work in Paris to Projects Research Initiative, to present a basic set of climate tests for application in assessments of proposed new projects and strategic undertakings (policies plans and programs). Those tests are summarized in Box 1, below. The proposed tests provide a foundation and a context for examining how meeting Canada's *Paris Agreement* commitments can best be served through the design and application of federal assessment law.

Any set of clear, consistent and potentially effective "climate tests" for application in assessments will rest on clarification of the national implications of Canada's international climate change mitigation commitments under the United Nations Framework Convention on Climate Change (UNFCCC) and the *Paris Agreement*. Our analysis of Canada's commitments and the best available independent research on what is feasible in Canada finds that our "fair share" deadline for decarbonizing our economy has likely passed and that we must therefore

[1] House of Commons of Canada, *Impact Assessment Act,* part 1 of Bill C-69, as passed by the House of Commons and introduced in the Senate, 20 June 2018, s.93(e), online: https://www.parl.ca/LegisInfo/BillDetails.aspx?billId=9630600&Language=E. The same requirement for considering potential for hindering or contributing to meeting commitments is now also included in the *Canadian Energy Regulator Act* [s.262 (2)(f) and s.298(3)(f)] as passed by the House of Commons on 20 June 2018. The provisions of the latter Act will apply to regulatory decision making on energy projects subject to federal regulatory authority.

- cut our domestic anthropogenic GHG emissions effectively to zero as soon as possible, with 2050 as our working target;[2]
- seek consistently to achieve more rapid progress towards decarbonisation, and
- to make substantial contributions outside Canada to the global effort to keep global average temperatures well below 2ºC with best efforts to keep warming below 1.5ºC.

The following discussion addresses use of assessment law as a key tool for meeting our domestic obligations.

Box 1. Tests to be applied to determine whether a proposed undertaking would or would not contribute to meeting Canada's international climate change mitigation commitments

The core test is that all projects and other proposed undertakings that may be GHG significant over their lifetime must

- contribute to meeting Canada's international climate change mitigation commitments, and not hinder Canada's transition to GHG neutrality in time to meet those commitments.[3]

The international commitments currently established chiefly under the *Paris Agreement* require Canada to do its fair share

- to keep overall climate warming "well below 2ºC" and to pursue efforts to limit the increase to 1.5ºC above pre-industrial levels" (Article 2.1);
- to reach GHG neutrality in the second half of this century at the latest, "on the basis of equity, and in the context of sustainable development and efforts to eradicate poverty" (Article 4.1.); and
- to anticipate regular review and revision of signatories' commitments to reflect progressively increasing nationally determined contributions that represent each signatory's "highest possible ambition" (Article 4.3, Article 14).

These commitments are to be met while also ensuring respect for human rights, including Indigenous rights, and pursuing other sustainability objectives such as biodiversity.

More specific tests that elaborate on the core test can be based on analyses using a suite of complementary available tools for determining whether a proposed undertaking will contribute to or hinder meeting our international commitments. The following list includes analyses that can be used in an elementary way now but need be developed and

[2] Canada's *Mid-Century Strategy* aims only for an 80% reduction of GHG emissions from 2005 levels by 2050, by which time Canada's cumulative emissions would be far greater than the most lenient estimate of our fair share. See *Mid-Century Long-Term Low-Greenhouse Gas Development Strategy* (Gatineau: ECCC, 2016), online: http://publications.gc.ca/collections/collection_2017/eccc/En4-291-2016-eng.pdf.

[3] This is a restatement of s.63(e) of the *Impact Assessment Act,* as proposed, as it apples to climate change mitigation. See Box 4.2, below.

specified further for Canadian application.

Tests based on particular analyses using a range of tools would, for example, require a proposed undertaking

- to contribute to the major transformations that are needed in key sectors – including energy, transportation, buildings, manufacturing, resources, agriculture, and possibly forestry – to achieve GHG neutrality in Canada in time to meet our international commitments;
- to avoid any direct or indirect effects that would hinder timely transition to GHG neutrality;
- to fit on a credible sectoral or regional pathway to meeting Canada's international commitments;
- to be consistent with staying within an equitable GHG budget for Canada (and within the global GHG budget consistent with meeting international objectives), as further specified for a sector or region;
- to be viable if the proponents of the undertaking had to pay the full costs associated with all unabated GHGs properly attributable to the undertaking over its lifespan and lifecycle, with these full costs determined by the GHG price needed to achieve timely transition to a GHG-neutral economy or the full social cost of associated climate change (the share of overall anticipated global damages attributable to the undertaking's unabated GHGs); [check]
- to avoid, or compensate for, any addition to the costs of making a timely transition to GHG neutrality;
- to avoid any properly attributable GHG emissions or sink impairments past the Canadian deadline for GHG neutrality entailed by Canada's current international commitments, or provide legitimate new domestic offsets[4] to neutralize any such emissions or sink impairments; and
- to be consistent with ensuring that Canadian GHG mitigation and sink enhancement initiatives reflect "highest possible ambition" and best efforts, while not impeding or delaying more promising options.

Tests based on existing domestic policy guidance can also be used, if that guidance is adjusted to reflect our current and anticipated international commitments. Such tests would need to favour transparently developed and credible policies. In every case the guidance would have to be consistent with meeting Canada's international commitments.

For illustration, given current domestic policy guidance, a proposed undertaking would be required

- to be consistent with meeting Canada's current Nationally Determined Contribution (NDC), plus additional requirements to address the gap between the current NDC and the more demanding commitments of the *Paris Agreement*, and

[4] The *Paris Agreement* allows for internationally transferred mitigation outcomes through cooperation but international offsets should be considered only after robust methodologies and governance systems have been developed.

to anticipate needs for increasing ambitions in future national commitments under that Agreement; and

- to be consistent with the requirements implied by the *Pan-Canadian Framework on Clean Growth and Climate Change* and its implementing legislation, plus additional requirements to address the gap between the Framework components and the current NDC, as well as the gap between the current NDC and the *Paris Agreement*.

Specifying these tests through open and meaningfully participative strategic policy making, including application of legislated strategic assessment requirements, would be preferable to relying on case-by-case debates on the test requirements and implications. Also, these tests would need to be applied to all existing and proposed activities and undertakings affecting prospects for meeting Canada's climate change mitigation commitments, including those that would not be subject to legislated assessment requirements.

All climate tests will need to be updated regularly in light of tightening international commitments, the evolution of climate science and learning from application experience.

2. Climate change mitigation and the new assessment law

Assessment law is among the most powerful available means Canada has for acting on its international climate change mitigation commitments. It has long applied to major projects, including hydrocarbon extraction, transportation and energy generation projects that involve GHG emissions. As well, assessment law can be applied to broader strategic undertakings – policies, plans and programs with important consequences for meeting or failing to meet climate change mitigation commitments.

So far, Canada's record on climate change mitigation has been disappointing. The word "climate" did not appear in either of the main versions of the *Canadian Environmental Assessment Act* (1995 and 2012). Federal authorities have not translated their international climate change commitments into implications for projects subject to assessment. Lacking the needed guidance, assessors and decision makers have failed to determine the implications in individual cases. Even the most recent assessments of projects with evident climate change implications – including assessments of highly controversial pipelines for transporting diluted bitumen – made no serious attempts to determine whether approving the projects would be consistent with meeting Canada's climate commitments. The results, not surprisingly, have included approvals of projects with lifetimes and attributable GHGs continuing long after Canada should have achieved net zero anthropogenic GHG emissions.

The current federal government, however, signed the *Paris Agreement* and has engaged actively in new climate initiatives, including negotiation of the *Pan-Canadian*

Framework. It has also initiated the review of assessment processes[5] that led to the new *Impact Assessment Act* in Bill C-69.[6] The *Impact Assessment Act,* as passed, sets out requirements and processes for assessment and decision making on designated projects and provides for broader regional and strategic assessments. It adopts a sustainability-based approach to assessment[7] and, as noted above, it explicitly requires consideration of whether proposed projects subject to assessment will "hinder or contribute to" meeting Canada's climate change commitment.[8] Moreover, the government has begun preparations for strategic-level assessment to clarify the implications of Canada's climate commitments for project assessments under federal law.[9]

These are welcome indications of serious intent to use assessment law as an effective tool for meeting the Paris commitments. What is less certain is how the new climate-centred assessment and decision-making requirement is to be met, what climate-important projects will be assessed, and how the provisions for strategic assessments will be used to clarify the implications of Canada's climate commitments for particular undertakings. At the time of writing, Bill C-69, including the *Impact Assessment Act*, was awaiting consideration by the Senate and legislators may choose to reduce some uncertainties through amendments before the bill is passed. We can expect, however, that much will be left for clarification and specification in enforceable regulations and/or policy guidance.

The following discussion focuses on how the new federal assessment law and its core requirements can and should be clarified and specified, especially through regulations and supportive policies, to play a positive role in meeting Canada's climate commitments.

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[5] The assessment law reform process began in 2016 and included an extensive public review by an Expert Panel (Expert Panel on the Review of Federal Environmental Assessment Processes, *Building Common Ground: A New Vision for Impact Assessment in Canada* (April 2017), online: <https://www.canada.ca/en/services/environment/conservation/assessments/environmental-reviews/environmental-assessment-processes/building-common-ground.html>, followed by release and public response to a subsequent government *Discussion Paper* (Government of Canada, Environmental and Regulatory Reviews, June 2017), online: <https://wwa/content/dam/themes/environment/conservation/environmental-reviews/share-your-views/proposed-apprw.canada.coach/discussion-paper-june-2017-eng.pdf> in French: <https://www.canada.ca/fr/services/environnement/conservation/evaluation/examens-environnementaux/faites-connaitre-vos-opinions/approche-proposee.html>.

[6] House of Commons of Canada, *Impact Assessment Act,* part 1 of Bill C-69, as passed by the House of Commons and introduced in the Senate, 20 June 2018, s.93(e), online: https://www.parl.ca/LegisInfo/BillDetails.aspx?billId=9630600&Language=E.

[7] The Act requires consideration of whether proposed projects will contribute to sustainability, as well as avoid or mitigate adverse effects. See especially s.63(a).

[8] The requirement appears in the Act in identical language in two places: in the list of factors to be considered in all assessments (s.22(1)) and as one of five core factors that are to provide the basis for decisions on assessed projects made by the Minister of Environment and Climate Change or the Governor in Council (Cabinet) (s.63).

[9] Government of Canada, *Discussion Paper: Developing a Strategic Assessment of Climate Change,* July 2018, online: https://www.strategicassessmentclimatechange.ca/discussion-paper.

3. The purpose, scope and core objectives of the law

Climate change mitigation is an atypical consideration for assessment law. The usual concerns have been the traceable local and regional effects of projects. Useful consideration of climate change mitigation effects requires a focus on long term global consequences. It is best centred on project implications for meeting international climate change commitments, including needs for transformation as well as more conventional mitigation. Because of the nature of these commitments, the law needs to deliver best efforts rather than only being consistent with specific compliance requirements such as those implied by national or provincial targets. This approach in turn is best supported by assessment requirements that aim for overall positive contributions to sustainability from each approved project, and thus include climate change mitigation with other mutually supporting means of achieving and preserving lasting wellbeing.

The *Impact Assessment Act* provides a promising base. In addition to requiring consideration of whether an assessed project will hinder or contribute to meeting Canada's climate change commitments, it establishes a "contribution to sustainability" test as a context for climate change considerations. Moreover, it requires consideration of alternatives, providing an opening for identification of best options. The next step is to ensure that these foundations are translated clearly and applied effectively.

4. Climate-related analyses and criteria for assessments and decision making under the law

The core climate requirements in the new Act – centred on contributing to, and not hindering efforts to meet Canada's climate commitments – are unlikely to be understood or applied reliably and predictably unless they are accompanied by specific directions for application and compliance. The directions will need to set out the necessary analytical approaches, criteria for evaluations, specific tests to be used and means of applying these tests. As well, the directions must clarify what information is required to serve these activities so that proponents, assessors, and other process participants share a common understanding of what is involved. Perhaps most importantly, the specific directions are needed for decision makers – not only to establish clear expectations but also to confirm that the rules will be applied authoritatively and consistently.

Attention to specifics is needed in several key areas of vagueness and uncertainty:

(i) Comparative evaluation of alternatives

In all assessments, the public interest is best served by processes designed to identify best options, rather than make yes or no decisions on the acceptability of proposed undertakings. This is especially important for climate-significant projects because meeting our climate commitments requires best efforts to reduce and eliminate GHG emissions and sink impairments.

The *Impact Assessment Act* as proposed supports seeking best options by requiring all assessments to consider not only the proposed project but also alternative means of carrying out the project and alternatives to the project. For climate change mitigation as well as for other sustainability-related objectives, further direction is needed

- to clarify that the selection of the proposed project, and decision making on whether or not to approve the project, must be based on a comparative evaluation of the alternatives; and
- to specify how reasonable alternatives are to be identified and compared in assessments and assessment decisions.

(ii) Specified criteria and tests

The core criteria for assessments and decisions under the *Impact Assessment Act* are established in section 63 the Act.[10] See Box 2, below. The criteria combine climate change mitigation obligations with an imperative to seek overall contributions to sustainability, avoid or mitigate adverse effects and respect the interests and rights of Indigenous peoples.

All of the criteria need clarification and specification through regulations with further detail in policy guidance.

Box 2: The Impact Assessment Act's core considerations for decision making, section 63

63 The Minister's determination under paragraph 60(1)(a) in respect of a designated project referred to in that subsection, and the Governor in Council's determination under section 62 in respect of a designated project referred to in that subsection, must include a consideration of the following factors:

(a) the extent to which the designated project contributes to sustainability;

(b) the extent to which the adverse effects within federal jurisdiction and the adverse direct or incidental effects that are indicated in the impact assessment report in respect of the designated project are adverse;

(c) the implementation of the mitigation measures that the Minister or the Governor in Council, as the case may be, considers appropriate;

(d) the impact that the designated project may have on any Indigenous group and any adverse impact that the designated project may have on the rights of the Indigenous peoples of Canada recognized and affirmed by section 35 of the *Constitution Act, 1982*; and

(e) the extent to which the effects of the designated project hinder or contribute to the Government of Canada's ability to meet its environmental obligations and its commitments in respect of climate change.

[10] In the *Impact Assessment Act*, the core criteria for decision making by the Minister of Environment and Climate Change and the Governor in Council (Cabinet) are set out in s.63. Important related considerations are provided in s.22(1), which lists key considerations for all assessments.

The core criterion on contribution to sustainability (set out in section 63(a)) needs regulatory direction and supporting policy guidance that provides

- more specific criteria setting out the generic requirements for progress towards sustainability, their interactions and their links to other key considerations in Canadian assessment law (including human rights, gender equity, and reconciliation and respect for the interests and rights of Indigenous peoples)
- means of further specifying the criteria in individual assessments to recognize the particulars of the case and context;
- criteria for considering trade-offs; and
- procedural and methodological approaches for applying these criteria (e.g., in the comparative evaluation of alternatives).

The specific climate-related criteria to be set out in regulation in support of section 63(e) need to fill the gap between Paris and projects. That is no simple task. The major categories of needed regulatory guidance would include criteria and tests for assessments and decision making on climate-significant undertakings. The regulations and complementary policy guidance would

- cover the steps towards GHG neutrality within the deadlines implicit in Canada's international commitments, including steps to ensure sufficiently complete and timely reduction of GHG emissions, to protect and enhance existing GHG sinks, and create permanent new GHG sinks;
- require positive contributions to the transition to a low-GHG future as needed to meet Canada's current commitments and retain sufficient flexibility to accommodate more demanding future obligations;
- specify what is needed to apply the multiple climate change mitigation policy tools and climate change mitigation tests set out in Box 1, above;
- require proposed undertakings to avoid, or provide legitimate new domestic offsets to neutralize, any properly attributable GHG emissions or sink impairments past the Canadian deadline for GHG neutrality entailed by Canada's current international commitments;
- require proposed undertakings to be consistent with ensuring that Canadian GHG mitigation and sink enhancement initiatives reflect "best efforts" and not impede more promising options; and
- favour capacity to deepen GHG emission cuts or increase sink enhancements to address higher future requirements arising from the increasingly ambitious future national commitments expected under the *Paris Agreement.*

Further direction through regulation and policy guidance should be provided to clarify

- how the climate change mitigation obligations are to be met in ways that also serve other sustainability-based purposes and criteria under the law; and
- how requirements, including conditions of approval, may be amended in light of evolving climate change understanding and changes in future international commitments, technological and other innovations that affect the availability of

new options (e.g., for additional and/or less costly mitigation, or for more effective sink enhancements and newly-proven permanent offsets).

(iii) The process for developing climate-related regulations

Perhaps even more than other regulations that are needed for the *Impact Assessment Act*, those for climate change will be complex, demanding and controversial as well as crucial. Moreover, climate-related assessment regulations would need to be elaborated in considerable detail for informed and consistent application. A credible process for the development of these regulations – with meaningful public participation and rigorous and independent assessment – is therefore required.

One possibility is use of an open and accountable strategic assessment process. Provisions for law-based strategic assessments are introduced in the *Impact Assessment Act*[11] and, as noted above, the federal government is planning a strategic assessment on the implications of Canada's climate change commitments. If done with suitable participation, rigour and independence, this strategic assessment could provide both regulatory clarification of climate-related assessment requirements and a model for future strategic assessments. Unfortunately, the results of such a strategic assessment, or any equivalent credible process, are not likely to be available soon for translation into regulations.

(iv) Interim means of addressing climate commitments in assessments while adequate regulatory and policy criteria and other guidance are being developed

In the interim, the core climate requirement stands. Each climate-significant project assessment and decision will need to be informed by an evaluation of whether or not the project would hinder or contribute to meeting the Canada's climate commitments. In the absence of formal elaborations of the specific criteria, tests and methods, the issues must be addressed case-by-case in the assessments of individual undertakings. The deliberations and decision making in these assessments should proceed with critically examined use of the best available information in support of specifying and applying the tests set out in Box 1, above.

Even for the interim period, basic initial working policy direction for climate-related evaluations and rationales should be possible. If credibly prepared, such interim guidance would make early application of the climate assessment requirements more consistent and predictable, less onerous, and less vulnerable to challenge. However, any interim working guidance would need to be built openly on a rigorously developed base that is adequate to the task of judging contributions to meeting the international commitments. Working specifications of the Box 1 tests would be a good start.

5. Climate-related trade-off rules and processes

Trade-offs pose some of the biggest challenges in assessment process design and those involving climate change mitigation are particularly difficult. Because climate change is

[11] *Impact Assessment Act*, s.92-103. See the discussion in section 7, below

increasingly disastrous the longer it remains unchecked, climate change mitigation has essentially become a non-negotiable imperative. But because climate change is also gradual and has delayed effects, mitigation action has continued to be compromised. Accordingly, anticipating how to deal with climate-related trade-offs is crucial.

To address the need for basic direction on trade-off rules and processes affecting climate commitments, the statute and regulations should

- require any assessment supporting a proposed undertaking that involves a climate-related trade-off (or any other significant trade-off) to document efforts to identify a viable alternative that avoids the trade-off;
- require justification of any accepted trade-off that would make meeting climate mitigation commitments more difficult in light of trade-off rules established under the Act, with explanation of how the compromise of prospects for meeting climate change mitigation commitments will be made up through other new initiatives;
- provide regulatory and policy guidance on the limits to possible compromises of consistency with meeting climate commitments; and
- provide specifically for refusal to review any proposal for an undertaking that would exceed any such limits.[12]

6. Application of assessment requirements to potentially climate-significant project-level undertakings

The *Impact Assessment Act*, section 109(b), provides for establishment by regulation of a Project List that identifies and delineates categories of projects to which law-based assessment requirements apply, including projects that could have important consequences for meeting Canadian climate change mitigation commitments. Section 9 of the Act also empowers the Minister of Environment and Climate Change to designate for assessment particular projects beyond those in the Project List.

Development of the Project List should ensure that the categories of climate-relevant projects included in the list cover all projects that individually or cumulatively could have a substantial effect on prospects for meeting Canada's climate change mitigation commitments, including effects that would make meeting these commitments more difficult.

Identification and definition of climate-relevant project categories to include in the list should take into account multiple factors, including potential for

- annual attributable (including direct and indirect) GHG emissions and/or sink impairments over a certain threshold;
- lifetime attributable emissions and/or sink impairments over a certain threshold;

[12] General authority for such refusals is established in the *Impact Assessment Act*, s.17(1)(b).

- attributable emissions and/or continued sink impairments in Canada beyond the established or reasonably anticipated deadline for GHG neutrality in Canada overall and in the relevant sector;
- contribution to cumulatively significant GHG emissions or sink impairments at a level that would make meeting specific mitigation commitments (e.g., for a sector or region) more difficult;[13]
- contribution to further entrenching or extending fossil dependency or activities that impair GHG sinks;
- important roles in a sector that is understood to require significant transformation to ensure climate mitigation commitments are met; and
- inability to meet any requirement entailed by the climate change mitigation tests set out in Box 1, above.

The same considerations should guide the Minister's use of the provisions for designating climate-important projects that are not anticipated in the Project List.

7. Application of assessment requirements to potentially climate-significant strategic-level undertakings

While the *Impact Assessment Act* focuses on assessment of projects, it also establishes a process for assessment of strategic undertakings – new or revised policies, plans, programs and other such government initiatives. The provisions [sections 92-103] are not well elaborated and would benefit from clarifying amendments. However, the general regulatory provisions in the Act [section 109(h)] may be broad enough to support key steps.

For determination of what strategic undertakings are to be subject to strategic assessments under the law, the Act empowers the Minister to initiate an assessment of any federal "policy, plan or program" or "issue" that is "relevant to conducting impact assessments" [section 95].

Clarification of this provision, and predictability of its application, would be enhanced by establishment by regulation of a Strategic Undertakings List that identifies and delineates categories of policies, plans and programs to which law-based assessment requirements apply. The categories would include strategic undertakings that, individually or cumulatively, could have important consequences for meeting Canadian climate change mitigation commitments.

Supporting regulations would be needed to set criteria for identifying and defining climate-relevant categories of strategic undertakings and for case-by-case designation of strategic undertakings for law-based assessments. The criteria should incorporate

[13] For example, any project with significant attributable GHG emissions and a project life extending over ten years may be judged likely to lock in emissions past the date for virtual elimination of anthropogenic GHG emissions in Canada.

attention to the multiple factors set out above for the climate-related categories in the Project List, placing greater emphasis on the potential for indirect effects on GHG emissions and sink impairments.

The forthcoming strategic assessment on the implications of Canada's climate change commitments for project assessments seems likely to be the first major strategic assessment under, or anticipating, the new law. The value of that strategic assessment will depend on a suitably broad substantive mandate – covering the full implications of the *Paris Agreement* for Canadian deadlines, use of analytical tools, decision criteria and tests – and a rigorous, transparent, participative and credibly independent process.

Few strategic assessment process details are set out in the *Impact Assessment Act*. Specifications in regulations should ensure that every assessment of a strategic level undertaking

- is open and transparent;
- encourages and supports meaningful participation;
- applies explicit sustainability-based criteria, including those based on the core climate change mitigation criterion in section 63, to deliver positive contributions to meeting Canada's climate change mitigation commitments and to block strategic undertakings that would hinder meeting these commitments;
- compares a suitable range of reasonable alternatives;
- is minimally vulnerable to political influence; and
- is otherwise likely to be rigorous and worthy of public credibility.

8. Climate-related information and standards for evaluations

In the *Impact Assessment Act*, the list of factors to be considered in all assessments is set out in section 22(1). The considerations represent broad categories of factors (alternatives, effects of various kinds, knowledge and comments from key sources, etc.). In each case, due attention entails information gathering. In most cases, analyses of some sort are also involved.

For clarity of expectations and consistency of practice, regulatory guidance and policy guidance will be needed. Detailed elaborations of expectations and approaches will be especially crucial for information and analyses concerning the climate change considerations, because they are new to federal assessments.

Specific matters needing elaboration include means for determining

- what GHG emissions and carbon sink impairments are properly attributed to a proposed project or strategic undertaking and its alternatives;
- what qualifies as a positive effect on anthropogenic GHG sink enhancement that may be taken into account in assessments;
- what, if any, offsets for domestic GHG emissions or GHG sink degradation may be taken into account in assessments;

- how alternatives are to be identified and properly considered in cases involving implications for climate commitments.
- how to apply the several tests set out in Box 1 to an individual undertaking – including whether and how well the proposed undertaking (and its alternative option) would contribute to timely progress along the identified pathways to meeting climate commitments and respect for GHG budget limitations through their lifetimes;
- the costs of mitigation and/or damages associated with GHG emissions (and carbon sink losses) in evaluations of overall project costs and associated project viability;
- the costs associated with future stranded assets and further entrenchment of GHG-emitting sectors, structures and practices; and
- the extent to which a proposed undertaking and its alternatives would hinder or contribute to the major transformations needed overall and in key sectors to achieve GHG neutrality in Canada in time to meet our international commitments.

Authoritative direction will be also needed on how to treat climate matters in the context of other obligations, including how climate-related imperatives are to be treated

- in deliberations and decisions involving trade-offs; and
- in cases that may affect Indigenous rights, including Aboriginal and treaty rights (and the associated duty to consult and accommodate), and rights under the UN Declaration on the Rights of Indigenous Peoples to free, prior and informed consent.

9. Multi-generational interests and learning

Climate change mitigation and progress towards sustainability are long-term objectives that require broadly informed intergenerational vision and commitment. Both demand significant, though gradual multi-generational transitions.

Serious attention to these long-term transition needs faces two major problems. Future generations are not present now to defend their own interests, including their interests in avoiding disastrous global climate change. And multi-generational transitions for climate and sustainability purposes are highly complex, and considerable effort is required to understand why they are needed and how they can be achieved.

In response, the regulatory and other tools guiding application of the Act need to

- strengthen and support intergenerational equity, including through decision criteria and trade-off rules emphasizing *lasting* wellbeing, respect for the interests of future generations, and obligations to identify and assess long term effects; and
- facilitate use of assessment processes to foster learning about climate change mitigation needs and opportunities, such as through measures that emphasize encourage open and participative use of the climate commitments compliance

tests in Box 2 above, encourage participative construction and comparison of long-term climate and sustainability scenarios, ensure independent critical evaluations of contentious climate analyses, and make regular use of strategic assessments to address big climate and other sustainability issues in credible public processes.

10. Interjurisdictional collaboration

The *Impact Assessment Act* emphasizes collaboration between the federal government and other jurisdictions. For climate change purposes, the collaboration should be built jointly on acceptance of federal responsibility to lead action to meet the country's international climate change commitments and active encouragement and facilitation of interjurisdictional collaboration in meeting those responsibilities.

To encourage interjurisdictional collaboration on climate change mitigation matters, the regulations, policy guidance and initiatives in practice should make best efforts to deliver

- joint initiation of climate-related strategic undertakings, joint assessments of climate-related undertakings, and joint monitoring of approved undertakings and response to the monitoring findings; and
- government-to-government collaboration between federal and Indigenous authorities, in decision making on climate-related matters, recognizing that climate-change mitigation successes and failures will affect Indigenous rights and interests.

11. Learning and adjusting climate assessment directions and guidance

The discussions above on meeting Canada's climate commitments through assessments under the new *Impact Assessment Act* have focused on needed specifics. The Act itself could and may be amended to flesh out some of its bare bones contents. The bulk of the concerns raised above, however, will be left to regulations and policies.

Of the two, enforceable regulatory direction is the stronger tool. While policies are valuable for supporting details and interim measures, their application at least in assessment matters has been unreliable and largely ineffective unless carefully anchored in the statute and regulations. Both, however, will be crucial in meeting the climate commitments in the *Impact Assessment Act*.

At best, Canada has a weak existing base of guidance for and experience in addressing climate change mitigation commitments seriously in assessment practice. The gap between the *Paris Agreement* and assessments of particular undertakings has been largely neglected in assessment practice and our best efforts in this report have only begun the needed deliberations. The climate assessment rules and guidance will need to accommodate learning from continuing advancements in climate science and from the

results of experience in applying the new climate provisions in this legislation. They will also have to be adjusted to deal with increasing ambitions in future national commitments under the *Paris Agreement*.

12. Feasibility

Any analysis focused on the implications of the *Paris Agreement* and Canada's associated Canadian international commitments to climate change mitigation will raise concerns about feasibility of implementation. Inevitably, doubts will be expressed about whether the transitions involved can be accomplished politically, economically and institutionally, and whether the costs will be acceptable. Almost as inevitably, the discussants will need reminding that the effects of the "do little" alternative are more certain and more deeply unacceptable. Climate change damage is already substantial and growing. Allowing overall warming and other changes across the Paris thresholds and beyond threatens the planet's life-sustaining systems and the civilizations we have built upon those systems. The feasibility questions are about how, not whether, to meet our international commitments.

None of that makes the feasibility questions any less important. But we may wish to frame them differently. Rather than treating feasibility concerns as the enemy of effective climate action, we might ask how meeting our international commitments can be done in ways that have the most beneficial effects – how they can maximize understanding, protect the most vulnerable, deliver lasting economic prosperity, and build mutually reinforcing support among all relevant authorities and stakeholders.

The core requirements of the *Impact Assessment Act* as proposed establish core decision factors that combine climate change mitigation obligations with an imperative to seek overall contributions to sustainability, avoid or mitigate adverse effects and respect the interests and rights of Indigenous people. That package provides a fully workable foundation for pursuing climate change mitigation with multiple lasting benefits.

13. Conclusions and recommendations

The new federal *Impact Assessment Act* is sustainability-based and requires consideration of whether assessed undertakings would "hinder or contribute to" meeting Canada's climate change commitments. However, the Act's promising basic requirements are unlikely to be understood or applied reliably and predictably unless accompanied by specific directions for application and compliance.

Recommended amendments to the Act, or regulations and supportive policy under the Act, would deliver the following specifics:

- clarify how contributing to (and not hindering) meeting the commitments entails consistency with viable pathways towards GHG neutrality within the deadlines implicit in Canada's international commitments;

- clarify how assessments should incorporate
    - contributing to transitions to a low-GHG future
    - avoiding or offsetting GHG emissions or sink impairments past the Canadian deadline for GHG neutrality,
    - avoiding entrenchment of climate-inappropriate structures, practices and dependencies,
    - ensuring "best efforts" for GHG mitigation and sink enhancement, and
    - favouring capacity to meet increasingly ambitious future national commitments;
- clarify how the climate change mitigation obligations are to be met in ways that also serve other sustainability-based purposes and criteria under the law;
- specify requirements for all assessments to include comparative evaluation of alternatives as well as the proposed undertaking, with particular attention comparisons to identify best options for contributing to meeting climate commitments;
- establish trade-off rules and processes affecting climate commitments, ensuring that climate trade-offs are avoided to the extent possible, subject to explicit limitations, supported by explicit public justification;
- ensure that the Project List, which identifies and delineates categories of projects to which the law-based assessment requirements apply, covers all projects that could have important consequences for meeting Canadian climate change mitigation commitments, with particular attention to
    - annual and lifetime attributable (direct and indirect) GHG emissions and/or sink impairments over a certain threshold, as well as those that extend beyond the deadline for GHG neutrality;
    - contribution to cumulatively significant GHG emissions or sink impairments that make specific mitigation commitments more difficult to meet, as well as the contribution to further entrenching fossil fuel dependency; and
    - sectors that require transformation to ensure climate commitments are met.
- establish at the strategic level a similar list that identifies and delineates categories of policies, plans, programs and strategic issues that require assessment, including strategic undertakings that, individually or cumulatively, could have important consequences for meeting Canadian climate change mitigation commitments;
- specify processes for regional and strategic assessments, including the anticipated strategic assessment on meeting climate commitments, to ensure transparency and meaningful participation, apply sustainability-based criteria, compare a suitable range of alternatives, and be rigorous and worthy of public credibility;
- clarify means of responding to strategic assessment findings, including those on climate matters, though authoritative guidance for project level assessments;
- while comprehensive regulations and policy guidance are being prepared, establish interim working direction on how the extent to which proposed undertakings and alternatives would hinder or contribute to meeting Canada's climate commitments is to be determined and documented in individual assessments;
- set out detailed expectations and approaches to climate-related information and standards for evaluations, including best means for determining

    - which GHG emissions and sink effects are properly attributed to particular undertakings, including attention to lifecycle and lifespan direct, indirect and cumulative effects;
    - the extent of positive effects on anthropogenic GHG sink enhancement;
    - legitimate offsets for GHG emissions or sink degradation;
    - how to identify and compare the climate implications of alternatives;
    - how to use carbon pricing, social cost of carbon, costing of future stranded assets and entrenchment of GHG-emitting sectors, and other means of identifying the economic implications of climate-important undertakings;
    - contributions to the major transformations needed to achieve GHG neutrality, including means of ensuring just transition; and
    - effects on intergenerational equity;
- clarify means of fostering and facilitating interjurisdictional collaboration, including joint climate-related strategic undertakings, joint assessments of climate-related undertakings, and joint monitoring, as well as government-to-government collaboration between federal and Indigenous authorities; and
- extend opportunities for learning and adjusting climate assessment directions and guidance.

Finally, for application in both project and strategic assessments, we propose the suite of climate tests presented above in Box 1. These should guide the comparative evaluation of alternatives and decision making on proposed undertakings. Applications of the climate tests, duly elaborated in regulations and policy guidance under the new *Impact Assessment Act*, could play a major role in ensuring the assessment practice, including decision making, makes positive contributions to Canadian efforts to meet our *Paris Agreement* commitments.

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